

Abstract

A leak detection system capable of automatically detecting a leak in a pressurized piping system. A pressure decay test is utilized to test for leaks in the piping system. Disruption to users of the piping system is reduced by only performing the pressure decay
5 test when there is no user demand on the piping system. Thus, a leakage test is performed by first determining whether there is user demand on the piping system and proceeding with a pressure decay test only if there is no user demand present. If user demand is initiated during the performance of a pressure decay test, the system detects the user demand and halts the pressure decay test until the user demand stops.